

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Dr. Norbert Diekhans )

Application No. (Unassigned) )

Filed: Herewith )

For: *Combine With a Device for* )

*Automatic Cleaning Regulation* )

Attorney Docket No. 3869/59156-083 )

Peoria, Illinois 61602-1241

16 August 2000

Honorable Director of the United States  
Patent and Trademark Office  
Washington, D.C. 20231



**INFORMATION DISCLOSURE STATEMENT**

Sir:

The following information and attached material are submitted for the Examiner's consideration relative to one or more of the claims in the above-identified application. Form PTO-1449 and a copy of each item listed thereon are attached.

Patent DE 27 53 503 A1 (sic) is cited by the applicant in the application. This is an error which has been corrected by preliminary amendment. The correct number is DE 27 53 505 A1 as listed on Form PTO-1449. Patent DE 44 25 453 C1 is also cited by the applicant in the application. The relevance of these documents to the claimed subject matter in this application is believed to be explained in the application.

Foreign patents DE 1 265 476, DE 38 10 723 A1, DE 43 25 310 A1, DD 288 085, and German magazine article "Gesteuerte adaptive Regelung einer Mähdrescherreinigungsanlage" that was published in "Grundlagen der Landtechnik" have not been translated into the English language. Rather, concise explanations of the relevance of the non-English language foreign patents and German magazine article are explained below per 37 C.F.R. § 1.98(a)(3):

German patent DE 1 265 476 relates to a combine harvester incorporating a regulating arrangement, whereby settings of the combine harvester are automatically adjusted. The sets of the ground speed, the drum speed and/or the concave setting of the combine harvester may vary in connection with the amount of incoming crop into the feeder housing of the combine harvester, the measured intake auger torque, cutterbar torque or different moisture content of the crop. This patent further discloses that the settings of the ground speed of the harvester or the drum speed can be limited by a predetermined range of settings.

German patent DE 38 10 723 A1 relates to a combine harvester incorporating an electronic regulating arrangement. It determines a setting of the speed of the adjustable cleaning fan arranged in the cleaning mechanism. Disclosed are a plurality of sensors distributed in the combine harvester for measuring the yield, the ground speed of the harvester, the amount of crop material on the preparation floor, the crop losses after the cleaning mechanism and the speed of the cleaning fan. All measurements are evaluated by the electronic system and a setting for the speed of the cleaning fan is determined in accordance with the measurements, the harvested crop type and crop moisture. Both the crop type and moisture can be manually fed into the electronic system by an operator's key striking. Automatic adjustment of the sieve opening is not disclosed.

German patent DE 43 25 310 A1 discloses an embodiment of a sieve and sectors located over the sieve and which extend transversally to the direction of crop flow. Each sector can be adjusted to different angles to each other or to the main sieve area. Automatic adjustment for each sector is not disclosed.

German patent DD 288 085 relates to a system arranged in a combine harvester which determines a trend about the throughput of crop through the combine harvester during harvesting. A plurality of sensors are arranged on the combine harvester in front of the cutterbar and into the harvester, and they measure different parameters of the crop and the combine harvester. All measurements are fed into a computer for evaluation of the incoming crop quantity and crop flow trend. The computer determines a ground speed and/or a setting of adjustable parameters of the combine harvester according to the determined trend. For adjustable devices, it discloses


devices which can be adjusted by a variable speed. Sieves and an adjustment for them are not disclosed.

The article "Gesteuerte adaptive Regelung einer Mähdrescher-reinigungsanlage" that was published in "Grundlagen der Landtechnik" Magazine, Band 36 (1986) Nr. 3, pages 73-78 refers to an adaptive controlled closed loop system for a cleaning mechanism arranged in a combine harvester. It is somewhat similar to German patent DE 27 53 505 and discloses an automatic control system for the fan speed of the cleaning mechanism. An air pressure sensor in the cleaning mechanism is located under the upper sieve and measures the air pressure in the cleaning mechanism. In connection with the harvested crop type and the measured pressure, a control system, including a memory with stored data, selects fan speed data out of the memory and arranges, by a closed loop system, the speed of the fan. This article shows a test installation and a test evaluation without disclosing sieves nor any adjustment of them. There is no automation technology disclosed.

One or more of the documents may have markings thereon. No significance is meant to be attached to the markings.

It is believed that this disclosure complies with the requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98, and the Manual of Patent Examining Procedure §609. If for some reason the examiner considers otherwise, it is respectfully requested that the undersigned be called so that any deficiencies can be remedied.

Respectfully submitted,



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Robert E. Muir, Reg. No. 23,017  
Husch & Eppenberger, LLC  
401 Main Street, Suite 1400  
Peoria, Illinois 61602  
(309) 637-4900